Amendments to the Claims

1. (Currently Amended) A method of assessing whether a human subject is afflicted with prostate cancer, the method comprising comparing:

a) the level of expression of an FKBP54 marker in a sample from a human subject, and

b) the normal level of expression of the marker in a control sample,

wherein a significant ~~difference between~~ increase in the level of expression of the marker in the sample from the subject ~~and~~ compared to the normal level is an indication that the human subject is afflicted with prostate cancer.

2. (Previously Presented) The method of claim 1, wherein the marker corresponds to a transcribed polynucleotide or portion thereof, wherein the polynucleotide comprises the marker.

3. (Previously Presented) The method of claim 1, wherein the sample comprises cells obtained from the subject.

4. (Previously Presented) The method of claim 3, wherein the cells are collected from the prostate gland.

5. (Previously Presented) The method of claim 3, wherein the cells are collected from blood.

6. (Previously Presented) The method of claim 1, wherein the level of expression of the marker in the sample differs from the normal level of expression of the marker in a subject not afflicted with prostate cancer by a factor of at least about 2.

7. (Previously Presented) The method of claim 1, wherein the level of expression of the marker in the sample differs from the normal level of expression of the marker in a subject not afflicted with prostate cancer by a factor of at least about 3.

8. (Previously Presented) The method of claim 1, wherein the level of expression of the marker in the sample is assessed by detecting the presence in the sample of a protein corresponding to the marker.

9. (Previously Presented) The method of claim 8, wherein the presence of the protein is detected using a reagent which specifically binds with the protein.

10. (Previously Presented) The method of claim 9, wherein the reagent is selected from the group consisting of an antibody, an antibody derivative, and an antibody fragment.

11. (Previously Presented) The method of claim 1, wherein the level of expression of the marker in the sample is assessed by detecting the presence in the sample of a transcribed polynucleotide or portion thereof, wherein the transcribed polynucleotide comprises the marker.

12. (Previously Presented) The method of claim 11, wherein the transcribed polynucleotide is an mRNA.

13. (Previously Presented) The method of claim 11, wherein the transcribed polynucleotide is a cDNA.

14. (Previously Presented) The method of claim 11, wherein the step of detecting further comprises amplifying the transcribed polynucleotide.

15. (Previously Presented) The method of claim 1, wherein the level of expression of the marker in the sample is assessed by detecting the presence in the sample of a transcribed polynucleotide which anneals with the marker or anneals with a portion of a polynucleotide, wherein the polynucleotide comprises the marker, under stringent hybridization conditions.

16. (Currently Amended) A method for monitoring the progression of prostate cancer in a human subject, the method comprising:

a) detecting in a subject sample at a first point in time, the expression of an FKBP54 marker;

b) repeating step a) at a subsequent point in time; and

c) comparing the level of expression detected in steps a) and b), and therefrom monitoring the progression of prostate cancer in the human subject, wherein an increase in the expression of the FKBP54 marker is an indication of prostate cancer progression in the human subject.

17. (Previously Presented) The method of claim 16, wherein the marker corresponds to a transcribed polynucleotide or portion thereof, wherein the polynucleotide comprises the marker.

18. (Previously Presented) The method of claim 16, wherein the sample comprises cells obtained from the subject.

19. (Previously Presented) The method of claim 18, wherein the cells are collected from the prostate gland.

20. (Previously Presented) The method of claim 18, wherein the cells are collected from blood.

21. (Withdrawn) A method of assessing the efficacy of a therapy for inhibiting prostate cancer in a subject, the method comprising comparing:

a) expression of a FKBP54 marker in the first sample obtained from the subject prior to providing at least a portion of the therapy to the subject, and

b) expression of the FKBP54 marker in a second sample obtained from the subject following provision of the portion of the therapy,

wherein a significantly lower level of expression of the marker in the second sample, relative to the first sample, is an indication that the therapy is efficacious for inhibiting prostate cancer in the subject.

22. (Withdrawn) A method of assessing the potential of a test compound to trigger prostate cancer in a cell, the method comprising:

a) maintaining separate aliquots of cells in the presence and absence of the test compound; and

b) comparing expression of a FKBP54 marker in each of the aliquots,

wherein a significantly enhanced level of expression of the FKBP54 marker in the aliquot maintained in the presence of the test compound, relative to the aliquot maintained in the absence of the test compound, is an indication that the test compound possesses the potential for triggering prostate cancer in a cell.

23. (Withdrawn) A method of treating a subject afflicted with prostate cancer, the method comprising providing to cells of the subject an antisense oligonucleotide complementary to a polynucleotide corresponding to a FKBP54 marker.

24. (Withdrawn) A method of inhibiting prostate cancer in a subject at risk for developing prostate cancer, the method comprising inhibiting expression of a gene corresponding to a FKBP54 marker.

25. (Withdrawn) A method for identifying a compound useful for treating prostate cancer, comprising:

a) measuring the expression level of a FKBP54 marker in a cell in the presence of a test compound; and

b) comparing the expression measured in step a) to the expression of a FKBP54 marker in a cell in the absence of the compound,

wherein the compound is useful for treating prostate cancer when the expression level of the FKBP54 marker in the presence of the test compound is lower than its expression level in the absence of the test compound.

26. (Withdrawn) The method of claim 25, wherein the expression level is determined by measuring the levels of mRNA of the FKBP54 marker.

27. (Withdrawn) The method of claim 25, wherein the expression level is determined by measuring the levels of the protein of the FKBP54 marker.

28. (Withdrawn) The method of claim 25, wherein the cell is a prostate cancer cell.

29. (Withdrawn) A method for identifying a compound useful for treating prostate cancer, comprising

a) measuring an activity of a FKBP54 marker; and

b) comparing the activity measured in step a) to the level of activity of the FKBP54 marker in the absence of the test compound,

wherein the compound is useful for treating prostate cancer when the activity of the FKBP54 marker in the presence of the test compound is lower than its activity in the absence of the test compound.

30. (Withdrawn) The method of claim 29, wherein the cell is a prostate cancer cell.

31. (Withdrawn) A method of treating prostate cancer in a patient, comprising administering to the patient a compound which decreases the expression of a FKBP54 marker.

32. (Withdrawn) The method of claim 31, wherein the compound decreases expression of mRNA of the FKBP54 marker.

33. (Withdrawn) The method of claim 31, wherein the compound decreases expression of the FKBP54 marker protein.

34. (Withdrawn) A method for determining the efficacy of androgen withdrawal treatment in a subject afflicted with prostate cancer, comprising:

a) detecting in a subject sample at a first point in time, the expression level of a FKBP54 marker;

b) repeating step a) at a subsequent point in time occurring after the subject begins androgen withdrawal treatment; and

c) comparing the level of expression of the FKBP54 markers detected in steps a) and b), wherein a decrease in the level of expression indicates that the androgen withdrawal treatment has decreased efficacy.